



SEQUENCE LISTING

<110> YEH, EDWARD T.H.

<120> USES FOR A NOVEL CELL-DEATH-PROTECTING PROTEIN

<130> UTSN:248US

<140> 09/484,964

<141> 2000-01-18

<150> 08/964,162

<151> 1997-11-04

<150> 60/030,302

<151> 1996-11-05

<160> 18

<170> PatentIn Ver. 2.0

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<211> 1465

<212> DNA

<213> Homo sapiens

 $\langle 220 \rangle$

<221> CDS

<222> (88) . . (390)

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 Met Ser Asp Gln Glu Ala Lys Pro Ser

act gag gac ttg ggg gat aag aag caa ggt gaa tat att aaa ctc aaa 162
Thr Glu Asp Leu Gly Asp Lys Lys Gln Gly Glu Tyr Ile Lys Leu Lys

10					15					20					25	
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Val	Ile	Gly	Gln	Asp	Ser	Ser	Glu	Ile	His	Phe	Lys	Val	Lys	Met	Thr	
				30					35					40		

aca cat ctc aag aaa ctc aaa gaa tca tac tgt caa aga cag ggt gtt 258
Thr His Leu Lys Lys Leu Lys Glu Ser Tyr Cys Gln Arg Gln Gly Val
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cca atg aat tca ctc agg ttt ctc ttt gag ggt cag aga att gct gat 306
Pro Met Asn Ser Leu Arg Phe Leu Phe Glu Gly Gln Arg Ile Ala Asp
60 65 70

aat cat act cca aaa gaa ctg gga atg gag gaa gaa gat gtg att gaa 354
Asn His Thr Pro Lys Glu Leu Gly Met Glu Glu Glu Asp Val Ile Glu
75 80 85

gtt tat cag gaa caa acg ggg ggt cat tca aca gtt tagatattct 400
Val Tyr Gln Glu Gln Thr Gly Gly His Ser Thr Val
90 95 100

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<210> 2
<211> 101
<212> PRT
<213> Homo sapiens

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Lys Gln Gly Glu Tyr Ile Lys Leu Lys Val Ile Gly Gln Asp Ser Ser
      20             25             30
Glu Ile His Phe Lys Val Lys Met Thr Thr His Leu Lys Lys Leu Lys
      35             40             45
Glu Ser Tyr Cys Gln Arg Gln Gly Val Pro Met Asn Ser Leu Arg Phe
      50             55             60
Leu Phe Glu Gly Gln Arg Ile Ala Asp Asn His Thr Pro Lys Glu Leu
      65             70             75             80
Gly Met Glu Glu Glu Asp Val Ile Glu Val Tyr Gln Glu Gln Thr Gly
      85             90             95
Gly His Ser Thr Val
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<210> 3
<211> 774
<212> DNA
<213> Homo sapiens
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<223> Y = C or T
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<222> (689)
<223> N = A, C, G or T
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<222> (739)
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<223> N = A, C, G or T

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<210> 4

<211> 95

<212> PRT

<213> Homo sapiens

<400> 4

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 1             5             10             15
His Ile Asn Leu Lys Val Ala Gly Gln Asp Gly Ser Val Val Gln Phe
      20             25             30
Lys Ile Lys Arg His Thr Pro Leu Ser Lys Leu Met Lys Ala Tyr Cys
      35             40             45
Glu Arg Gln Gly Leu Ser Met Arg Gln Ile Arg Phe Arg Phe Asp Gly
      50             55             60
Gln Pro Ile Asn Glu Thr Asp Thr Pro Ala Gln Leu Glu Met Glu Asp
      65             70             75             80
Glu Asp Thr Ile Asp Val Phe Gln Gln Gln Thr Gly Gly Val Tyr
      85             90             95

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<210> 5

<211> 1733

<212> DNA

<213> Homo sapiens

<220>

<221> modified_base

<222> (19)

<223> N = A, C, G or T

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<210> 6
 <211> 103
 <212> PRT
 <213> Homo sapiens

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<400> 6
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      20             25             30
Ile Lys Arg His Thr Ser Leu Ser Lys Leu Met Lys Ala Tyr Cys Glu
      35             40             45
Arg Gln Gly Leu Ser Met Arg Gln Ile Arg Phe Arg Phe Asp Gly Gln
      50             55             60
Pro Ile Asn Glu Thr Asp Thr Pro Ala Gln Leu Arg Met Glu Asp Glu
      65             70             75             80
Asp Thr Ile Asp Val Phe Gln Gln Gln Thr Gly Gly Val Pro Glu Ser
      85             90             95
Ser Leu Ala Gly His Ser Phe
      100

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<210> 7
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 <212> PRT
 <213> Artificial Sequence
 <220>
 <223> Description of Artificial Sequence: Synthetic Peptide

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<400> 7
Arg Gly Ser His His His His His His
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<210> 8
 <211> 30
 <212> DNA
 <213> Homo sapiens

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<400> 8
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<210> 9
<211> 30
<212> DNA
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<400> 9
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30

<210> 10
<211> 7
<212> PRT
<213> Artificial Sequence
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<223> Description of Artificial Sequence: Synthetic
Peptide

<400> 10
Arg Gly Ser His His His His
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<210> 11
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<212> PRT
<213> Influenza virus

<400> 11
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1 5

<210> 12
<211> 4
<212> PRT
<213> Homo sapiens

<400> 12
His Ser Thr Val
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<210> 13
<211> 101
<212> PRT
<213> Saccharomyces cerevisiae

<400> 13
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Glu Val Lys Pro Glu Thr His Ile Asn Leu Lys Val Ser Asp Gly Ser
20 25 30
Ser Glu Ile Phe Phe Lys Ile Lys Lys Thr Thr Pro Leu Arg Arg Leu
35 40 45
Met Glu Ala Phe Ala Lys Arg Gln Gly Lys Glu Met Asp Ser Leu Arg
50 55 60
Phe Leu Tyr Asp Gly Ile Arg Ile Gln Ala Asp Gln Thr Pro Glu Asp
65 70 75 80
Leu Asp Met Glu Asp Asn Asp Ile Ile Glu Ala His Arg Glu Gln Ile
85 90 95

Gly Gly Ala Thr Tyr
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<210> 14
<211> 80
<212> PRT
<213> Homo sapiens

<400> 14
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20 25 30
Lys Glu Gly Ile Pro Pro Asp Gln Gln Arg Leu Ile Phe Ala Gly Lys
35 40 45
Gln Leu Glu Asp Gly Arg Thr Leu Ser Asp Tyr Asn Ile Gln Lys Glu
50 55 60
Ser Thr Leu His Leu Val Leu Arg Leu Arg Gly Gly Gly Gly Leu Arg
65 70 75 80

<210> 15
<211> 76
<212> PRT
<213> Homo sapiens

<400> 15
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Ile Glu Pro Thr Asp Lys Val Glu Arg Ile Lys Glu Arg Val Glu Glu
20 25 30
Lys Glu Gly Ile Pro Pro Gln Gln Gln Arg Leu Ile Tyr Ser Gly Lys
35 40 45
Gln Met Asn Asp Glu Lys Thr Ala Ala Asp Tyr Lys Ile Leu Gly Gly
50 55 60
Ser Val Leu His Leu Val Leu Ala Leu Arg Gly Gly
65 70 75

<210> 16
<211> 30
<212> PRT
<213> Homo sapiens

<400> 16
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<210> 17
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<212> DNA
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<221> CDS
<222> (136)..(438)

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gaagccaccg tcatac atg tct gac cag gag gca aaa cct tca act gag gac 171
      Met Ser Asp Gln Glu Ala Lys Pro Ser Thr Glu Asp
              1              5              10

ttg ggg gat aag aag caa ggt gaa tat att aaa ctc aaa gtc att gga 219
Leu Gly Asp Lys Lys Gln Gly Glu Tyr Ile Lys Leu Lys Val Ile Gly
      15              20              25

cag gat agc agt gag att cac ttc aaa gtg aaa atg aca aca cat ctc 267
Gln Asp Ser Ser Glu Ile His Phe Lys Val Lys Met Thr Thr His Leu
      30              35              40

aag aaa ctc aaa gaa tca tac tgt caa aga cag ggt gtt cca atg aat 315
Lys Lys Leu Lys Glu Ser Tyr Cys Gln Arg Gln Gly Val Pro Met Asn
      45              50              55              60

tca ctc agg ttt ctc ttt gag ggt cag aga att gct gat aat cat act 363
Ser Leu Arg Phe Leu Phe Glu Gly Gln Arg Ile Ala Asp Asn His Thr
      65              70              75

cca aaa gaa ctg gga atg gag gaa gaa gat gtg att gaa gtt tat cag 411
Pro Lys Glu Leu Gly Met Glu Glu Glu Asp Val Ile Glu Val Tyr Gln
      80              85              90

gaa caa acg ggg ggt cat tca aca gtt tagatattct ttttattttt 458
Glu Gln Thr Gly Gly His Ser Thr Val
      95              100

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<210> 18
 <211> 101
 <212> PRT
 <213> Homo sapiens

<400> 18
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 20 25 30
 Glu Ile His Phe Lys Val Lys Met Thr Thr His Leu Lys Lys Leu Lys
 35 40 45
 Glu Ser Tyr Cys Gln Arg Gln Gly Val Pro Met Asn Ser Leu Arg Phe
 50 55 60
 Leu Phe Glu Gly Gln Arg Ile Ala Asp Asn His Thr Pro Lys Glu Leu
 65 70 75 80
 Gly Met Glu Glu Glu Asp Val Ile Glu Val Tyr Gln Glu Gln Thr Gly
 85 90 95
 Gly His Ser Thr Val
 100